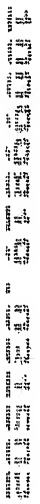
What is claimed is:



CLAIMS

1. A computer system comprising:

a synchronization server for synchronizing the operation of one or more virtual test systems; and

one or more test client computers coupled to the synchronization server, wherein respective ones of the one or more test client computers generate first requests and second requests to the synchronization server.

2. The computer system of claim 1, wherein respective ones of the one or more virtual test systems are coupled to the respective ones of the one or more test client computers and the one or more virtual test systems are coupled to a contact center associated with contact center functions; wherein:

the one or more virtual test systems include at least one of a virtual telephone caller system associated with virtual telephone caller actions, a virtual agent telephone system associated with virtual agent telephone actions, a virtual agent computer system associated with virtual agent computer actions, and a virtual web user system associated with virtual web user actions; and,

respective ones of the first requests and respective ones of the second requests are associated with respective ones of the virtual telephone caller actions, respective ones of the virtual agent telephone actions, respective ones of the virtual agent computer actions and respective ones of the virtual web user actions.

3. The computer system of claim 2, wherein the respective ones of the first requests and the respective ones of the second requests are logically related, to provide logically related requests.

4. The computer system of claim 3, wherein the respective ones of the first requests and the respective ones of the second requests are provided having identifier key values for associating respective ones of the logically related requests.

5. The computer system of claim 4, wherein the respective ones of the first requests and the respective ones of the second requests are provided having number of clients values for further associating respective ones of the logically related requests.

6. The computer system of claim 4, wherein the synchronization server controls the one or more test client computers to provide a measurement of one or more time latency values

7. The computer system of claim 5, wherein the time latency values correspond to at least one of a time latency value between respective ones of the virtual telephone caller actions, a time latency value between respective ones of the virtual agent telephone actions, a time latency value between respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual web user actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual agent telephone actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual agent computer actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual agent computer actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual web user actions and respective ones of the contact center functions, a routing accuracy corresponding to connection between a virtual telephone caller and an agent, and a display accuracy associated with an agent computer screen display.

8. A synchronization method comprising::

generating first requests and second requests from one or more test client computers to a synchronization server, for synchronizing the operation of one or more virtual test systems.

9. The synchronization method of claim 8, further including:

generating at least one of virtual telephone caller actions with a virtual telephone caller system coupled to a respective one of the one or more test client computers, virtual agent telephone actions with a virtual agent telephone system coupled to a respective one of the one or more test client computers, virtual agent computer actions with a virtual agent computer system coupled to a respective one of the one or more test client computers, and virtual web user actions with a virtual web user system coupled to a respective one of the one or more test client computers; wherein:

the virtual telephone caller system, the virtual agent telephone system, the virtual agent computer system, and the virtual web user system are coupled to a contact center associated with contact center functions; and

respective ones of the first requests and respective ones of the second requests are associated with respective ones of the virtual telephone caller actions, respective ones of the virtual agent telephone actions, respective ones of the virtual agent computer actions and respective ones of the virtual web user actions.

10. The synchronization method of claim 9, further including:

logically relating respective ones of the first requests and respective ones of the second requests, to provide logically related requests.

11. The synchronization method of claim 10, further including:

associating respective ones of the logically related requests by relating identifier key values associated with the respective ones of the logically related requests.

12. The synchronization method of claim 11, further including:

relating number of clients values associated the respective ones of the first requests and

the respective ones of the second requests, to further associate respective ones of the logically related requests.

13. The synchronization method of claim 11, further including:

controlling the one or more test client computers to provide a measurement of one or more time latency values.

14. The synchronization method of claim 13, wherein the time latency values correspond to at least one of a time latency value between respective ones of the virtual telephone caller actions, a time latency value between respective ones of the virtual agent telephone actions, a time latency value between respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual web user actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual agent telephone actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual agent computer actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual agent computer actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual web user actions and respective ones of the contact center functions, a routing accuracy corresponding to connection between a virtual telephone caller and an agent, and a display accuracy associated with an agent computer screen display.

15. A synchronization method, including:

generating first requests and second requests from one or more test client computers to a synchronization server;

associating a portion of a first software program associated with a first respective one of the one or more test client computers with a respective on of the first requests having a first key value;

associating a portion of a second software program associated with a second respective one of the one or more test client computer with a respective one of the second requests having the first key value;

transmitting the respective one of the first requests to the synchronization server;

transmitting the respective one of the second requests to the synchronization server;

identifying a matching request pair as the respective one of the first requests having the first key value in combination with the respective one of the second requests having the first key value;

transmitting a notification of the matching pair from the synchronization server to the first respective one of the one or more test client computers and to the second respective one of the one or more test client computers; and

bypassing the portion of the first software program if the notification is received by the first respective one of the one or more test client computers.

16. A synchronization method, including:

generating first requests and second requests from one or more test client computers to a synchronization server;

associating a portion of a first software program associated with a first respective one of the one or more test client computers with a respective one of the first requests having a first key value and a first number of clients value;

associating a portion of a second software program associated with a second respective one of the one or more test client computer with a respective one of the second requests having the first key value and the first number of clients value;

transmitting the first respective one of the first requests to the synchronization server;

transmitting the respective one of the second test client requests to the synchronization

server;

identifying a matching request pair as the respective one of the first requests having the first key value and the first number of clients value in combination with the respective one of the second requests having the first key value and the first number of clients value;

transmitting a notification of the matching pair from the synchronization server to the first respective one of the one or more test client computers and to the second respective one of the one or more test client computers; and

pausing execution of the first software program at the portion of the first software program if the notification is received by the first respective one of the one or more test client computers.

17. A computer program product comprising a computer usable medium having computer readable code thereon for synchronizing one or more virtual test systems, including program code comprising:

instructions for generating first requests and second requests from one or more test client computers to a synchronization server.

18. The computer program product of claim 17, including:

instructions for generating at least one of virtual telephone caller actions with a virtual telephone caller system coupled to a respective one of the one or more test client computers, virtual agent telephone actions with a virtual agent telephone system coupled to a respective one of the one or more test client computers, virtual agent computer actions with a virtual agent computer system coupled to a respective one of the one or more test client computers, and virtual web user actions with a virtual web user system coupled to a respective one of the one or more test client computers; wherein:

the virtual telephone caller system, the virtual agent telephone system, the virtual agent computer system, and the virtual web user system are coupled to a contact center associated with contact center functions; and

respective ones of the first requests and respective ones of the second requests are associated with respective ones of the virtual telephone caller actions, respective

ones of the virtual agent telephone actions, respective ones of the virtual agent computer actions and respective ones of the virtual web user actions.

19. The computer program product of claim 18, further including:

instructions for logically relating respective ones of the first requests and respective ones of the second requests, to provide logically related requests.

20. The computer program product of claim 19, further including:

instructions for associating respective ones of the logically related requests by relating identifier key values associated with the respective ones of the logically related requests.

21. The computer program product of claim 20, further including:

instructions for relating number of clients values associated the respective ones of the first requests and the respective ones of the second requests, to further associate respective ones of the logically related requests.

22. The computer program product of claim 20, further including:

instructions for controlling the one or more test client computers to provide a measurement of one or more time latency values.

23. The computer program product of claim 22, wherein the time latency values correspond to at least one of a time latency value between respective ones of the virtual telephone caller actions, a time latency value between respective ones of the virtual agent telephone actions, a time latency value between respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual web user actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual agent telephone actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual agent telephone actions

and respective ones of the virtual agent computer actions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual agent computer actions and respective ones of the virtual web user actions, a time latency value between respective ones of the virtual telephone caller actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual agent telephone actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual agent computer actions and respective ones of the contact center functions, a time latency value between respective ones of the virtual web user actions and respective ones of the contact center functions, a routing accuracy corresponding to connection between a virtual telephone caller and an agent, and, and a display accuracy associated with an agent computer screen display.

24. A computer program product comprising a computer usable medium having computer readable code thereon for synchronizing one or more test client computers, including program code comprising:

instructions for generating first requests and second requests from one or more test client computers to a synchronization server;

instructions for associating a portion of a first software program associated with a first respective one of the one or more test client computers with a respective on of the first requests having a first key value;

instructions for associating a portion of a second software program associated with a second respective one of the one or more test client computer with a respective one of the second requests having the first key value;

instructions for transmitting the respective one of the first requests to the synchronization server;

instructions for transmitting the respective one of the second requests to the synchronization server;

instructions for identifying a matching request pair as the respective one of the first requests having the first key value in combination with the respective one of the second

requests having the first key value;

instructions for transmitting a notification of the matching pair from the synchronization server to the first respective one of the one or more test client computers and to the second respective one of the one or more test client computers; and

instructions for bypassing the portion of the first software program if the notification is received by the first respective one of the one or more test client computers.

25. A computer program product comprising a computer usable medium having computer readable code thereon for synchronizing one or more test client computers, including program code comprising:

instructions for generating first requests and second requests from one or more test client computers to a synchronization server;

instructions for associating a portion of a first software program associated with a first respective one of the one or more test client computers with a respective one of the first requests having a first key value and a first number of clients value;

instructions for associating a portion of a second software program associated with a second respective one of the one or more test client computer with a respective one of the second requests having the first key value and the first number of clients value;

instructions for transmitting the first respective one of the first requests to the synchronization server;

instructions for transmitting the respective one of the second test client requests to the synchronization server;

instructions for identifying a matching request pair as the respective one of the first requests having the first key value and the first number of clients value in combination with the respective one of the second requests having the first key value and the first number of clients value;

instructions for transmitting a notification of the matching pair from the synchronization server to the first respective one of the one or more test client computers and to the second respective one of the one or more test client computers; and

instructions for pausing execution of the first software program at the portion of the first

software program if the notification is received by the first respective one of the one or more test client computers.